REMARKS

This Amendment is responsive to the communication of June 9, 2004. Reconsideration of **claims 1-9, 12-14 and 16-19** is respectfully requested.

The Office Action

Claims 13 and 14 stand rejected under 35 U.S.C. §112, second paragraph.

Claims 16, 18 and 19 stand rejected under 35 U.S.C. §102(e) as being anticipated by Tarne (U.S. Patent No. 6,443,582).

Claim 17 stands rejected under 35 U.S.C. §102(b) as being anticipated by Tokunaga (U.S. Patent No. 5,375, 043).

Claims 1-3, 5, 7 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tung (U.S. Patent No. 5,842,297) in view of Tokunaga (U.S. Patent No. 5,375,043).

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Tung (U.S. Patent No. 5,842,297) in view or Tokunaga (U.S. Patent No. 5,375,043) and further in view of Lea (Patent Application Pub. No. US 20010038539).

Claims 6 and 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tung (U.S. Patent No. 5,842,297) in view of Tokunaga (U.S. Patent No. 5,375,043) and further in view of Yamana (U.S. Patent No. 5,418,384).

Claims 12 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gwo-Juh (U.S. Patent No. 6,164,791).

Claim 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Gwo-Juh (U.S. Patent No. 6,164,791) in view of Lea. (Patent Application Pub. No. US 20010038539).

Non-Art objections

The rejection of **claims 13-14** under §112, second paragraph, has been overcome by the appropriate amendments. It is respectfully requested that this ground of rejection be withdrawn.

Claims 1-9 Distinguish over Cited References

Claim 1 calls for among other limitations: discrete microstructures arranged on a curved surface. Tung discloses a luminant sign comprising a base including a pair of opposing castings and an image plate. The front and rear faces of the image plate

have display areas 42 defined by grooves 43. Each display area has reflective surfaces 44 formed therein. (Col. 3, lines 19-23.) Tokunaga discloses a lighting unit comprising a light guide plate and a plurality of LEDs. The light guide plate 1 includes a reflective surface 1a having a multiplicity of grooves. (Col. 2, lines 26-29.) The light guide plate 1 includes a pair of confronting side edges 1c each having a couple of small holes 1b intended to receive light emitting diodes 2a-2d. (Col. 2, lines 41-44.) In both Tung and Tokunaga, the grooves or the structures are positioned on a planar surface. In contrast, claim 1 is directed to microstructures which are positioned on a curved surface. Neither Tung, nor Tokunaga, taken singularly or in combination, disclose or suggest arranging structural elements within the wave guide on a curved surface, ie. a surface having "a pre-defined slope or curvative" (see paragraph 32 of the disclosure). It is therefore respectfully submitted that **claim 1 and dependent claims 2-9** distinguish patentably and unobviously over Tung and Tokunaga.

Claims 12-14 Distinguish over Cited References

Claim 12 calls for among other limitations: forming a pre-selected light output pattern viewable outside the wave guide. It is alleged in the Office Action that Gwo-Juh discloses the light scattered by the microstructures forming a definite preselected light output pattern. Applicants are directed to Figure 13 and col. 1, lines 44-49. Applicants respectfully traverse Examiner's interpretation of Gwo-Juh. To establish a prima facie obviousness, the prior art must teach or suggest all the claim limitations. Applicants respectfully submit Gwo-Juh neither teaches nor suggests creating defined preselected light output patterns as disclosed in claim 12 and supported by the specification, e.g. "walk," "don't walk," etc. Gwo-Juh discloses a backlight with a plurality of diffusing structures to form a more uniform backlight effect. A plurality of light guiding surfaces is formed by a simple design such that the illumination is greatly improved. (Col. 1, lines 44-48). Turning to Fig. 13, two sets of diffusing units are alternatively arranged with different angles and crossed over with each other to form a more uniform backlight effect. (Col. 3, lines 27-30). In contrast, the present application is directed to producing a localized light to form particular patterns as called for in claim 12 and extensively explained in the specification. (Applicants note here that, when resolving obviousness matters, the claims at issue should be interpreted in light of the specification.) In fact, Gwo-Juh is teaching away from the Applicants concepts. A diffused light is a light that is not concentrated or localized. (See Merriam-Webster's Collegiate Dictionary, 11ed.) By

diffusing the light one cannot create a defined preselected light output, e.g. "walk," "don't walk," etc. Gwo-Juh is simply not concerned with creating a directed light output. Finally, there is no motivation or suggestion in Gwo-Juh for one skilled in the art to modify it to create a predefined light output pattern. One, skilled in the art, would be looking to Gwo-Juh to create a light diffuser and not predefined localized light outputs. Nowhere does Gwo-Juh disclose or suggest microstructures that are selectively pre-arranged to produce a patterned directional light output. It is therefore respectfully submitted that **claim 12 and dependent claims 13-14** distinguish patentably and unobviously over Gwo-Juh.

Claim 17 Distinguishes over Cited References

Claim 17 calls for among other limitations: an encapsulant surrounding the plurality of light producing elements and abutting the light emissive wave guide. To establish anticipation, the reference must disclose every aspect of the invention, either expressly or impliedly. Tokunaga discloses a lighting unit comprising a light guide plate and a plurality of LEDs. The light guide plate 1 includes a pair of confronting side edges 1c each having a couple of small holes 1b intended to receive light emitting diodes 2a-2d. (Col. 2, lines 41-44.) Nowhere does Tokunaga disclose or suggest an LED encapsulant as an element separate from the light guide such that the encapsulant encompasses the LEDs. It is therefore respectfully submitted that **claim 17** distinguishes patentably over Tokunaga.

Claims 16 and 18-19 Distinguish over Cited References

Claim 16 calls for among other limitations: a substantially planar light emissive face, and a curved textured bottom surface. It is alleged in the Office Action that Tarne discloses a curved textured bottom surface 65. (Figs. 5&6, col. 3, lines 61-62.) Applicants respectfully traverse.

Tarne discloses, in Figs. 5&6, a substantially planar lens back surface 65 that has a plurality of reflective stepped faces 71 that are fully circumferential. (Col. 3, lines 61-65.) The reflective stepped faces are separated radially by connecting faces 72. (Col. 4, lines 8-10.) The light exits through the surface 84, which may be flat, curved or other. (Col. 4, lines 26-27.) Thus, Tarne discloses a lens which is created by stepped surfaces such that the surface with the largest diameter is covering a great deal of the entire lens back surface 65. The stepped surfaces are connected to each other in the

order of decreased diameters, such that the surface with the smallest diameter is disposed closest to the light emitting surface 84, effectively creating a cavity therein. In contrast, claim 16 calls for a curved textured bottom surface having an optical cladding opposed thereto. Nowhere does Tarne disclose or suggest an optical cladding as set forth in claim 16. It is therefore respectfully submitted that **claim 16 and dependent claims 18-19** distinguish patentably over Tarne.

CONCLUSION

For the reasons detailed above, it is respectfully submitted all claims remaining in the application (**Claims 1-9, 12-14 and 16-19**) are now in condition for allowance.

Respectfully submitted,

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9/9/04
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